

MISSOURI. Conservationist

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Feedback Fuels Our Efforts

Good management decisions are based on good information, and the Department depends on a variety of sources. Two of the most important are research and public feedback.

Throughout the history of the Conservation Department, public input has been a key component and starting point for making decisions that affect the future of forests, fish, and wildlife in the state. A citizen's committee led the effort to establish the Department, and Missouri citizens continue to be important partners for advancing conservation.

The Department gathers feedback year-round, through a variety of venues and methods. For example, last summer the Department gathered public input on the deer management plan and proposed regulation changes from deer hunter surveys, 14 open houses around the state, and a dedicated website comment page. Nearly 4,000 comments were received from open houses, online, and through Department regional offices in addition to the survey responses. As a result of that public input, coupled with biological considerations, seven recommendations are being considered for the 2016–2017 deer sea-

son. There will be further opportunities for public review of those recommendations online and at open houses this spring (see Page 6 for proposed regulations and open house details).

The Department also manages nearly 1 million acres for conservation and public use in Missouri. Conservation area plans, which include natural resource management and public use opportunities, have a 30-day public comment period, so interested citizens can give feedback on the area. These finalized plans are then posted online and at Department offices for easy public access.

Additional feedback is gathered from annual and multiyear surveys, stakeholder meetings, community presentations, social media, emails, letters, and through open public meetings of the Department's regulations committee and the Conservation Commission. Department staff also meet directly with landowners, hunters, anglers, birders, hikers, and outdoor enthusiasts in all areas of the state to better understand their conservation needs.

Public input is not only vital to the work we do, but an integral part of our mission to manage and protect the forests, fish, and wildlife resources for all to enjoy. It is where we intentionally begin each day, as we have for the past 78 years, so that we can help make a positive difference for the future of conservation in Missouri.

Thank you for being an important part of conservation! Your efforts and feedback make a difference.



Robert L. Ziehmer, director



Department staff meet directly with landowners and outdoor enthusiasts all over Missouri to better understand their conservation needs.

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To bag your bird, it helps to understand turkey communication

Cover: Wild turkeys strut during the spring mating season near Springfield, Missouri. Photograph by Noppadol Paothong. Find out how to talk turkey starting on Page 22.

📷 300–800mm lens • f/7.1 • 1/500 sec • ISO 800

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WHAT IS IT?

Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on Page 7.



PROUD TO REPRESENT

So proud of this state's efforts to preserve and protect our abundant natural resources. Tremendous effort. To me, what elevates these efforts to a higher level are the educational tools, especially the *Conservationist* magazine. Great articles and, even better, the photography. This month's cover by Noppadol Paothong is amazing. You have great photographers. Thanks for taking that extra effort to showcase our Missouri environment.

Crys Payne, Columbia

GRANDPA'S GIRL

I remember the first time going hunting with my grandpa. We were hunting turkey. The night before I went to bed, I was nervous.

I woke up at 5 a.m. and got my clothes on. We were about to leave, but my mom wanted

pictures. Finally, we drove out to our field. The rain had washed the road, so it was bumpy.

We set up, and then we heard something. It sounded like a turkey. My grandpa told me to get ready. That's when I really started to get nervous. I thought I would tell my grandpa I was scared, but I didn't. My grandpa is a professional. I got on everything that would protect me and did everything that he told me to do. So I stopped worrying. I got ready. I was starting to feel brave, but we stopped hearing the sound. We waited and waited, but didn't hear it again.

We took a break for breakfast, and then we went back to our hunting place. We looked all around for that turkey, but we never heard him gobble or make a sound. So we called it a day.

That night, I prepared again. I wasn't as nervous as I was before — I was excited! I woke up early again, and we headed out. I told myself

I just had to remember that my grandpa knew what he was doing, and I did, too.

We got settled. I was ready, and I was brave. But then I took a nap.

When I woke up, there was a turkey in the field. I got ready to shoot. It came closer and closer. I began to shake. The closer it came, the more I shook.

"Wait! We don't know if it's a hen or a gobbler. We can't shoot a hen," said grandpa.

The turkey finally got close enough. "It's a hen!" I said. I couldn't shoot it after all.

It was the last day of the season, but that was all right. I told my grandpa that I wanted to do it again next season. He said he did, too.

That was my first hunting experience, and it was with my hero — my grandpa.

Kayla (age 10), Cadet

FISH TO BOWFISH?

What fish are legal to shoot with a bowfishing setup in this state?

Nick Gardner, via Facebook

Conservation Department: Nongame fish are legal for bowfishing, and they include carp, carpsuckers, suckers, buffalo, drum, gar, and other species that are not defined as game fish. See pages 8–11 of our fishing summary booklet at mdc.mo.gov/node/6108. You can also pick up a copy at one of our regional offices or at a permit vendor near you.

NUISANCE FOXES

Do you guys come and trap animals that are getting too cozy with humans? We've got two foxes that come up to the house and play with our dogs' squeaky toys right out by the back door and do not run off. I love wildlife, but I'm concerned.

Tina Palmer, via Facebook

Conservation Department: We cannot trap them for you, but your regional office (see Page 3 for phone numbers) can provide traps for you to use. Before trapping, make your yard less friendly to the foxes. Remove the toys and any food that is attracting them. Scare them away with loud noises.



Reader Photo

YOU LOOK JUMPY

Andrew Tiedemann, of Nixa, Missouri, captured this photo of a female jumping spider on his deck. "I saw this little gal early one morning and the light happened to be perfect," said Tiedemann. "It took some patience. She kept wanting to turn." Tiedemann is a busy, stay-at-home dad raising three children. "When my children get a little older, I would like to devote more time to my photography," said Tiedemann. Conservation Department biologist Paul Calvert identified the spider as a female. He jokingly said that you can tell the spider is a girl by her eyelashes.



DEPARTMENT HEADQUARTERS

Phone: 573-751-4115

Address: PO Box 180,
Jefferson City 65102-0180

REGIONAL OFFICES

Southeast/Cape Girardeau: 573-290-5730

Central/Columbia: 573-815-7900

Kansas City: 816-622-0900

Northeast/Kirksville: 660-785-2420

Southwest/Springfield: 417-895-6880

Northwest/St. Joseph: 816-271-3100

St. Louis: 636-441-4554

Ozark/West Plains: 417-256-7161

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OMBUDSMAN QUESTIONS

Phone: 573-522-4115, ext. 3848

Address: Ombudsman, PO Box 180,
Jefferson City 65102-0180

Email: Ombudsman@mdc.mo.gov

EDITORIAL COMMENTS

Phone: 573-522-4115, ext. 3245

Address: Magazine Editor, PO Box 180,
Jefferson City 65102-0180

Email: Magazine@mdc.mo.gov

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Flickr: [flickr.com/groups/mdc-readerphotos-2015/](https://www.flickr.com/groups/mdc-readerphotos-2015/)

Email: Readerphoto@mdc.mo.gov

Address: Missouri Conservationist, Reader Photo,
PO Box 180, Jefferson City 65102-0180

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Outreach & Education vacant

Private Land Services Bill White

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Resource Science Mike Hubbard

Wildlife Jennifer Battson Warren

CONSERVATIONIST STAFF

Editor In Chief Nichole LeClair Terrill

Art Director Cliff White

Staff Writer/Editor Bonnie Chasteen

Staff Writer Heather Feeler

Photographer Noppadol Paothong

Photographer David Stonner

Designer Stephanie Thurber

Circulation Laura Scheuler

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Missouri Conservationist: mdc.mo.gov/node/83

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"Measure twice. Gnow once."

Agent Notes

A Recipe for Family Memories

WE ALL HAVE favorite childhood memories. Many of mine center on times spent hunting and fishing with family and friends. Now I have children of my own, and much of my free time is spent making memories with them in the outdoors. Helping to bag their first bird, seeing them nearly land the "big one," or making our way to that secret mushroom hideaway have all proven to be great experiences that helped our family connect and refocus in the midst of a busy schedule.

Throughout Missouri, conservation agents are involved in hosting hundreds of outdoor clinics each year. With topics ranging from fishing and fly-tying to turkey hunting and outdoor cooking, something will be sure to capture you and your family's interest. Other opportunities for great outdoor experiences include youth hunting seasons, Kids Fishing Day and Free Fishing Days, and the Discover Nature Girls Camp. Now is a great time to start planning your spring and summer schedule. For more information on these and other family friendly outdoor events, contact your local conservation agent or regional office (regional phone numbers on Page 3).

Spending time with your family and friends in the outdoors won't soon be forgotten. After all, "The best thing about memories is making them." (Anonymous)

Jade Wright is the conservation agent for Holt County. If you would like to contact the agent for your county, phone your regional conservation office listed on Page 3.



HUNTING & FISHING CALENDAR

FISHING	OPEN	CLOSE
Black Bass from Ozark Streams	05/24/14	02/28/15
Paddlefish	03/15/15	04/30/15
Trout Parks		
Catch-and-Release	11/14/14	02/09/15
Catch-and-Keep	03/01/15	10/31/15
HUNTING	OPEN	CLOSE
Coyote	05/12/14	03/31/15
Crow	11/01/14	03/03/15
Deer		
Archery	09/15/15	11/13/15
	11/25/15	01/15/16
Firearms		
Urban Zones Portion	10/09/15	10/12/15
Early Youth Portion	10/31/15	11/01/15
November Portion	11/14/15	11/24/15
Antlerless Portion (open areas only)	11/25/15	12/06/15
Alternative Methods Portion	12/19/15	12/29/15
Late Youth Portion	01/02/16	01/03/16
Turkey		
Archery	09/15/15	11/13/15
	11/25/15	01/15/16
Firearms		
Youth	04/11/15	04/12/15
Spring	04/20/15	05/10/15
Fall	10/01/15	10/31/15
Waterfowl	see the <i>Waterfowl Hunting Digest</i> or mdc.mo.gov/node/3830	
TRAPPING	OPEN	CLOSE
Beaver and Nutria	11/15/14	03/31/15

For complete information about seasons, limits, methods, and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, *The Spring Turkey Hunting Regulations and Information*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest*, and the *Migratory Bird Hunting Digest*. For more information, visit mdc.mo.gov/node/130 or permit vendors.

Operation Game Thief

Help put game thieves out of business. If you see a possible violation in progress, call your county conservation agent immediately or dial the toll-free number below:

1-800-392-1111

All information is kept in strict confidence. Desirable information includes names of violators, vehicle description and license number, as well as the violation location.

Ask MDC

Address: PO Box 180, Jefferson City, MO 65102-0180
Phone: 573-522-4115, ext. 3848 **Email:** AskMDC@mdc.mo.gov



We came across this strange pattern inside a tree we cut down. The tree was about 5-6 inches across, and the pattern was about 2-4 feet above the ground. I don't know what type of tree it was. We kept a slice because we thought it was pretty. What made the pattern?

That is most likely bird damage from one or two years ago made by a yellow-bellied sapsucker. This is a type of woodpecker that often pecks small, even, and closely spaced holes in trees to extract the sweet sap. Sapsuckers eat the inner bark, drink the sap, and catch insects such as ants that are attracted to the sap. Although sapsuckers defend their sap wells, several other animals, such as

squirrels, other birds, and insects, take advantage of the sap pooled in the holes. Hummingbirds may find their first meals of the season at sapsucker holes, which are usually available before flower nectar. The holes can damage trees and cause internal decay. A few more years of growth and the pattern would have merged into one large discoloration and would not have been visible unless you were really looking for it. Learn more about sapsuckers through our online Field Guide at mdc.mo.gov/node/20097.

What are the white-flowering trees I see blooming in the woods in March? They are not dogwoods.

They are most likely a native species called serviceberry. This shrub

or small tree typically grows in open, rocky woods and bluffs, usually on well-drained slopes. It is one of the first of Missouri's woody plants to bloom in spring, with showy white flowers that appear before the leaves. In autumn, the leaves turn gold and orange, often with some red. The bark is smooth and gray on younger trees but develops some long grooves as it ages. Serviceberry is in the rose family and is therefore related to apples and plums. The fruit of the serviceberry is edible and somewhat resembles small apples that turn from green to reddish-purple in June or July. It has a narrow, rounded crown that can reach about 40 feet high with a spread of about 35 feet. The serviceberry is increasingly used in landscaping for its showy white flowers, attractive summer foliage, autumn color, and red fruit. At least 35 species of birds eat the berries, and at least a dozen types of mammals eat the berries or browse the twigs and foliage. Serviceberries bloom for only a few weeks, but as early bloomers, they provide nectar to bees and other insects just emerging from winter hibernation. Learn more at mdc.mo.gov/node/6249.

On a walk around our pond during a recent warm spell, we saw a bunch of big tadpoles near the shore next to melting ice. Is this normal?

You probably saw bullfrog tadpoles. Bullfrogs are Missouri's largest species of frog and the most aquatic. They are typically active from late March to October. Breeding happens mid-May to early July and females can lay more than 20,000 eggs, which hatch in only 4-5 days. But it takes the tadpoles up to about 14 months to transform into frogs, and adult size isn't reached for another 2-3 years. The warm weather probably made the tadpoles active. The bullfrog is the official Missouri State Amphibian. Learn more at mdc.mo.gov/node/3961.



Comment on Deer Regulation Changes Under Consideration for the 2016–2017 Deer Season

During the summer of 2014, the Department gathered public input on the deer management plan and proposed regulations changes through surveys of deer hunters, during 14 open houses, and through a comment form online. In addition to the hunter surveys, almost 4,000 comments were received.

As a result of public input consistent with biological considerations, seven regulation changes are being considered for the 2016–2017 deer season. The Department will collect public comments from February through April regarding the deer regulation changes that are currently under consideration through

open houses and online comments. Proposed changes include:

Firearms Season Changes

- Maintain the current timing of the November portion and reduce the length to nine days.
- Expand the late youth portion to three days, beginning the first Friday after Thanksgiving.
- Reduce the length of the antlerless portion to three days, beginning on the first Friday in December.
- Eliminate the urban zones portion.

Archery Season Changes

- Allow crossbows as a legal method during the archery deer and turkey season.
- Reduce the limit of antlered deer during the archery season to one.

Conservation Area Regulations

- Simplify conservation area regulations by limiting methods and use of firearms and archery antlerless permits.

Regional Open Houses will be held to gather public input from 5–8 p.m. at the following locations:

- **Feb. 24:** Burr Oak Woods Conservation Nature Center; 1401 NW Park Road, Blue Springs
- **Feb. 26:** Powder Valley Conservation Nature Center; 11715 Cragwold Road, Kirkwood
- **March 3:** Springfield Conservation Nature Center; 4601 S. Nature Center Way, Springfield
- **March 5:** West Plains Civic Center; 110 St. Louis St., West Plains
- **March 10:** Cape Girardeau Conservation Nature Center; 2289 County Park Drive, Cape Girardeau
- **March 12:** Northeast Regional Office; 3500 S. Baltimore St., Kirksville
- **March 16:** Central Regional Office; 3500 East Gans Road, Columbia
- **March 31:** Northwest Regional Office; 701 James McCarthy Drive, St. Joseph

You can also learn more about these proposed regulations and share your comments online at mdc.mo.gov/deer-reg-comments, or mail your comments to Missouri Department of Conservation, Attn: Policy Coordination, PO Box 180, Jefferson City, MO 65102.

Hunting Skills Weekend for Families

The Conservation Department's first-ever Discover Nature — Families Hunting Skills Weekend workshop will be held March 13–15 at the Windermere Conference Center on Lake of the Ozarks. Families with members age 6 and older who are interested in learning how to hunt with firearms and archery equipment, and in finding new ways to spend time outdoors together, will have fun learning the skills they need.

Sessions will be taught by professional instructors. To qualify for the workshop, family members who are age 11 years and older must complete the first part of Missouri's two-part hunter-education certification. This initial knowledge portion of hunter education can be completed online, through self-study with a student book, or by registering for and attending a four-hour classroom session. For details on how to complete the knowledge portion of hunter education, visit mdc.mo.gov/node/3722.

The weekend will begin Friday afternoon with an opportunity for family members to complete the second part of hunter education,

a four-hour skills session in which students demonstrate what they have learned through the knowledge portion. Saturday and Sunday, families will participate in three hands-on skills sessions: Introduction to Firearms, Beginning Archery, and Basic Hunting. All equipment will be provided. Weekend activities will be held outdoors, so participants should dress appropriately for the weather.

The workshop is free to all registered participants, but families are responsible for making arrangements for their own lodging and meals through Windermere Conference Center. There are several options for lodging, including Lakeview Lodge, motel, family cabins, and camping. Contact Windermere at 573-346-5200 or 1-800-346-2215 for details, or visit windermereusa.org. To register, or for more information on the Department's Discover Nature — Families Hunting Skills Weekend, visit mdc.mo.gov/node/29866.

Report Lake Sturgeon Spawning

The Conservation Department has been stocking lake sturgeon in Missouri since the 1980s.

It takes lake sturgeon 25–30 years to become sexually mature, so those first fish are just now reaching adulthood. Males spawn every one to three years and females every four to seven years. In other populations, lake sturgeons tend to return to the same spawning sites. In Missouri, scientists want to identify those sites so that they can protect that habitat and those fish, and to identify similar sites.

Lake sturgeon spawning activity is noticeable. It is often described as “large brown fish, thrashing around on the rocks.” Prior to spawning, males will gather near the spawning site and cruise near the surface of the water. Their dorsal fins and tops of their tails will stick up out of the water, looking like shark fins. As spawning begins, several males will join a single female near a rocky shoreline and begin thrashing the water. The thrashing activity forces eggs and milt from the fish. The fertilized eggs will stick to the rocks until they hatch.

Although other species of fish may spawn in shallow water near shore, few others produce the same display at that time of year. The size of the

WHAT IS IT?

Muskrat

Ondatra zibethicus

Musk rats are semiaquatic, living statewide in marshes, sloughs, streams, rivers, ponds, and lakes. They dig homes in a stream or pond bank or build large houses out of vegetation in the shallow water. The nest, or den, is reached by means of a tunnel that usually opens under water. Muskrats breed from late winter to mid-September, with three peaks at the ends of March, April, and May. Pregnancy averages 28 days; usually a female produces two or three litters annually. The litters usually contain four to seven young, which are born blind and nearly helpless and naked. After a week they have coarse gray-brown fur. In another week, their eyes open and they start to swim and dive. At 3 to 4 weeks old they are weaned. Most breed for the first time in the following spring.

—photograph by Noppadol Paothong

(continued from Page 7)

fish involved will also be different. Fish on spawning sites can range from 25 pounds and 5 feet long to specimens weighing more than 100 pounds. Lake sturgeon have long cylindrical bodies and are typically brown on the head and back with white on the belly. They have hard, bony plates

called scutes on their back and sides. Their dorsal (top) fin is set far back on the body, just in front of a forked tail. Lake sturgeon can reach more than 7 feet long and weigh more than 200 pounds.

In Missouri, lake sturgeon should spawn between April 1 and the end of May, with the peak

occurring between April 15 and May 15. Lake sturgeon spawning will only occur in Missouri's rivers, but it can occur in any of them if the conditions are right. Spawning activity may be seen on the Missouri and tributary streams such as the Osage, Gasconade, Grand, and Lamine rivers. It may also occur on the Mississippi River and tributaries such as the Fabius, Salt, Cuivre, and Meramec. The fish are highly mobile and can travel hundreds of miles to find the right habitat, so many streams have the potential for spawning habitat.

If you see what you believe to be lake sturgeon spawning activity, please contact us immediately because spawning may only last up to three days. Do not disturb the fish or try to catch them, as they are protected in Missouri. Call Travis Moore at 573-248-2530 or send a picture to travis.moore@mdc.mo.gov. —Travis Moore



First State Record of Ivory Gull

Jan. 2, 2015, Jason Mullins of Quincy, Illinois, spotted an unusual gull perched on a patch of ice in the Mississippi River. To his amazement, he confirmed that it was an ivory gull from the high arctic regions of the world. The gull flew up and down the Missouri River near Quincy and crossed over to the Missouri side of the river, resting on the barges tied there. The bird remained in the area from Jan. 2–9 and was observed by hundreds of birders from across the country.

This is the first record of an ivory gull in Missouri, and the third record for Illinois. The ivory gull's North American breeding range includes the Canadian Arctic around islands west of Baffin Bay, the northern tip of Greenland, and on the Norwegian archipelago of Svalbard — all found about 14 degrees latitude north of the Arctic Circle. The gull usually feeds on seal carcasses left on the ice by polar bears and other predators. It seldom shows up in the lower 48 states, but it has been observed about once per year somewhere south of its maritime Canadian wintering areas.

The gull attracted birders from all over the United States. The day after its initial sighting, Department Wildlife Ecologist Brad Jacobs traveled to the site and joined a crowd of birders and reporters in the rain to watch the brilliant white gull sitting on the dam structure and flying up and down the river. During the bird's stay, Jacobs counted over 100 reports of the bird posted on eBird.org, an online, real-time bird listing website.

The ivory gull was last seen Jan. 9, leaving hundreds of out-of-state and out-of-country birders who traveled over the weekend disappointed. The bird hasn't been reported at another site yet, but it could easily be somewhere along the river at a location more difficult to access, enjoying a meal of gizzard shad. Unless someone finds it again, the birders in this hemisphere will have to wait for the species' random return to our (relatively tropical) frozen rivers. —Brad Jacobs and Sarah Kendrick

Trout Fishing Dates to Remember

Department of Conservation trout hatcheries provide year-round fishing opportunities and are an economic engine for the state. Hundreds of thousands of anglers from Missouri and beyond flock to the Show-Me State's four trout parks each year. They come to leave their troubles behind and lose themselves in the pursuit of rainbow and brown trout. Along the way, they also spend more than \$100 million, which supports thousands of jobs and sustains local economies.

Three of Missouri's trout parks — Bennett Spring near Lebanon, Montauk near Licking, and Roaring River near Cassville — are owned by the Missouri Department of Natural Resources. Maramec Spring Park near St. James belongs to The James Foundation. These destinations, with campgrounds, hiking trails, historic buildings, and other amenities, are wonderful destinations in their own rights. But trout provided by the Department are the main attraction.

March 1 marks the start of the catch-and-keep fishing season at Missouri's trout parks, and thousands of anglers have been making the pilgrimage to Missouri's trout temples on that date for more than 70 years. The number of anglers present on opening day depends partly on weather and partly on the day of the week on which March 1 falls. Total attendance at all four parks has topped 14,000 in years when the weather was good and the season opener

DID YOU KNOW?

We help people discover nature.

fell on a weekend. This year's Sunday opener promises an excellent turnout, even with poor weather conditions.

Bennett Spring, Montauk, and Roaring River expect approximately 3,000 anglers each. Maramec Spring expects to host as many as 2,000 anglers.

Hatchery managers use these estimates to determine how many trout to stock each day. Throughout most of the season, they stock 2.25 fish per expected angler. On opening day, however, they put three fish in the water for every angler expected to attend. These fish average 12 inches long. However, the Department also stocks dozens of "lunkers," surplus hatchery brood fish weighing upward of 3 pounds. A few tip the scales at more than 10 pounds.

If you can't make the opening day event, don't worry. There are plenty of opportunities and several special events scheduled throughout the year. These events provide citizens an opportunity to experience Missouri's trout parks and the great outdoors. The special events often include free or low-cost permits for youth, additional trout stocking by the Department to provide fish all day long, volunteers to help young anglers, and prizes for participants. For more information contact your regional Department office (phone numbers on Page 3). —*Andrew Branson*

Special Trout Park Events:

Roaring River, call 417-847-2430 for information

- Spring Kids Fishing Day, May 16
- Free Fishing Weekend, June 6–7
- Back to School Kids Fishing Day, Aug. 15
- W.O.W. Event, Oct. 10–11

Montauk, call 573-548-2585 for information

- Kids Fishing Day, May 2
- Free Fishing Days, June 6–7
- Summer's End Children's Free Fishing Day, Aug. 1
- Kids' Trout Fishing Tournament, Aug. 8

Bennett Spring, call 417-532-4418 for information

- Kids Fishing Day, May 2
- Free Fishing Days, June 6–7

Maramec Spring, call 573-265-7801 for information

- Kids Fishing Day, May 16
- Free Fishing Days, June 6–7
- Ladies Fishing Day, Sept. 12
- Derby Day, Oct. 31

Visit a Conservation Area Near You!

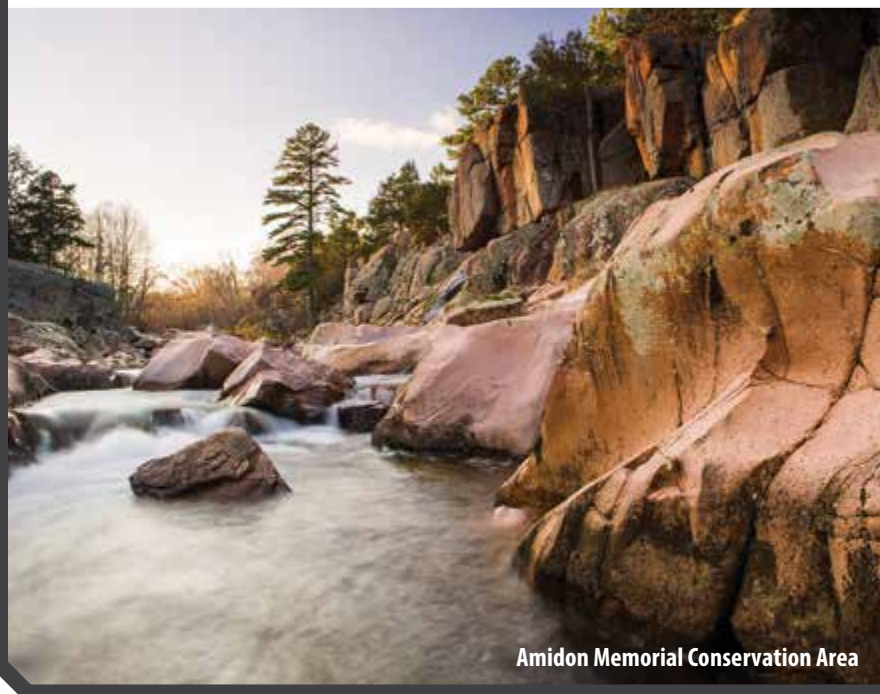
» **Whether you love to hunt,** fish, float, or just walk in the woods, there's a local Missouri Department of Conservation area where you can pursue your favorite outdoor interest.

» **The Department owns or manages** more than 1,000 conservation areas, including stream accesses, natural areas, and areas managed for healthy forests, fish, and wildlife. Fifty-five percent of Missourians visited a conservation area last year.

» **What's the difference** between conservation areas and parks? Purpose and management. The purpose of Missouri's state conservation areas is to provide prime habitat for wildlife and ensure public access to hunting, fishing, and wildlife-viewing opportunities. Area managers carefully cultivate the best possible natural habitat for Missouri's wildlife and plants. While most areas do not have developments such as RV hookups, picnic shelters, or plumbed toilets, many areas feature concrete boat ramps, shooting ranges, and trails that encourage a wide range of nature-based recreation.

» **If you're not familiar** with your county's conservation areas, you can find information about all of them in our online Conservation Atlas at mdc.mo.gov/node/8911.

» **Browse the online atlas** for places to tent-camp, hunt, fish, float, hike, ride your horse, go birding, gather mushrooms, photograph wildlife, picnic, and discover nature with your family. Most areas' information includes directions, phone number, recreation opportunities, regulations, a map of the area, and the area's brochure.

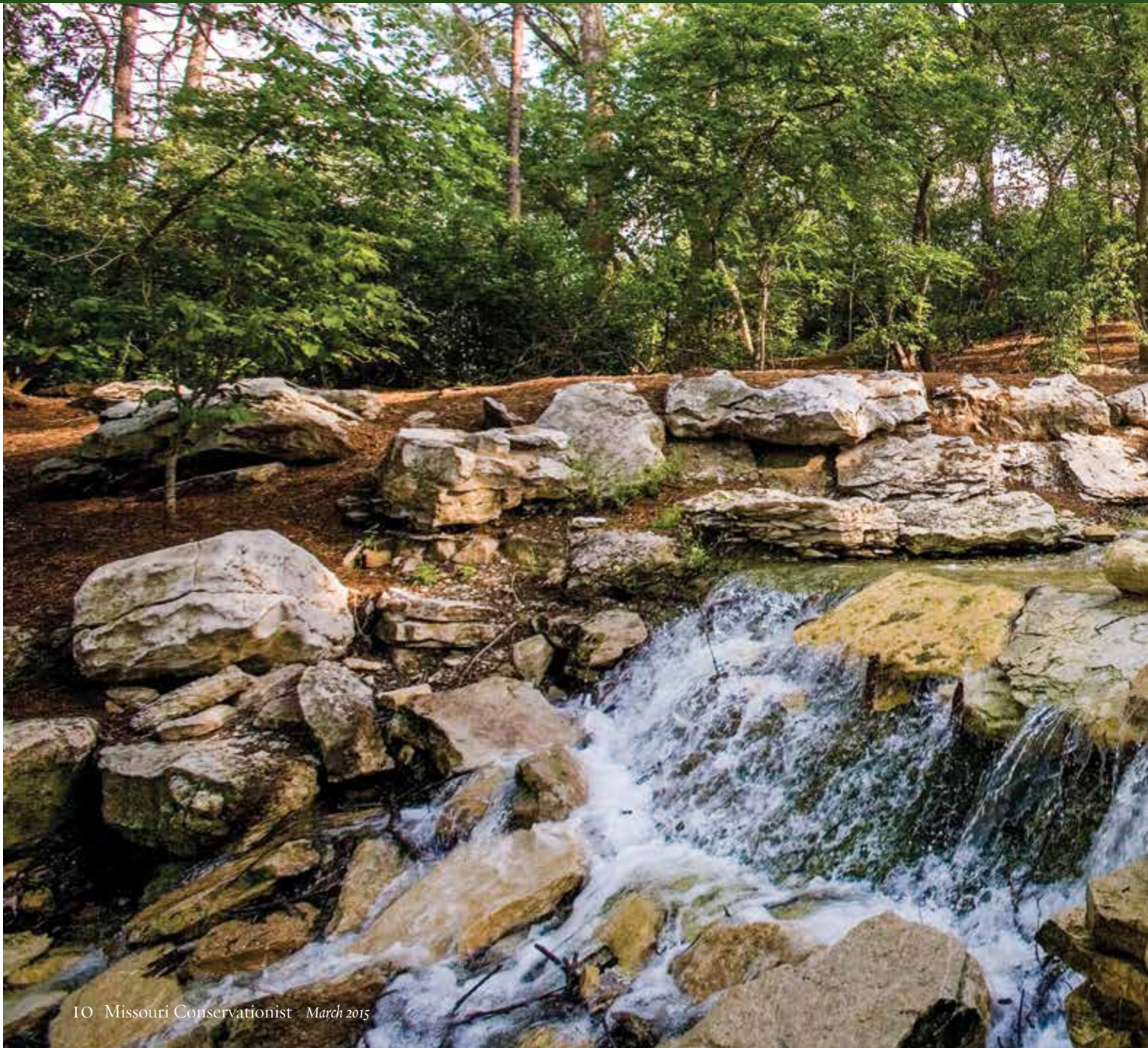


Amidon Memorial Conservation Area

TREES WORK FOR WILDLIFE AND PEOPLE

BY
ANN
KOENIG

Education program helps Missourians value — and promote — the many benefits of trees and forests





Forest Park in St. Louis. People report that woods and parks offer a better place for reflective thought, resting the mind, and creative thinking than their homes. Photograph by David Stonner



DID YOU KNOW THAT BEING around trees lowers your blood pressure and pulse rate? Or that kids perform better on tests and have reduced ADHD symptoms after being in nature? Trees along streets also raise home values by \$8,000 on average. Trees work. At the same

time they provide habitat for wildlife, wood products, and shade for our homes, trees work in other incredibly important and surprising ways we are only beginning to understand.

The Missouri Department of Conservation has created an educational campaign called Trees Work to increase awareness of the benefits our trees and forests provide. Many of us appreciate the beauty of an oak releasing its tender spring leaves, or a maple shading our deck without being aware of the real and valuable benefits those trees provide for our health, our families, our wallets, and our environment. The Trees Work campaign helps Missourians discover all the ways trees and forests are working for us in our everyday lives. It also provides information about how you can promote good forest management, no matter the size of your property.

TREES WORK FOR LESLIE STEPHENS

As part of the Trees Work campaign, the Department produced a series of posters, each with a different slogan that begins, "Without trees ..." and ends, "Trees Work!" For instance, the first poster says, "Without trees ... hammocks would just be blankets on the ground." Each poster is handcrafted in St. Louis using vintage letterpress and carvings from Missouri-grown wood. For the latest poster, the Department wanted to hear what Missourians had to say. We sponsored a contest to finish the phrase, "Without trees ..." and encouraged Missourians to enter in their own slogan.

When Leslie Stephens of Troy heard about the Trees Work contest to finish the phrase, "Without trees ..." she dug into her personal life to come up with her own slogan, one that seemed true and important to her.

Cooper Hill Conservation Area in Osage County



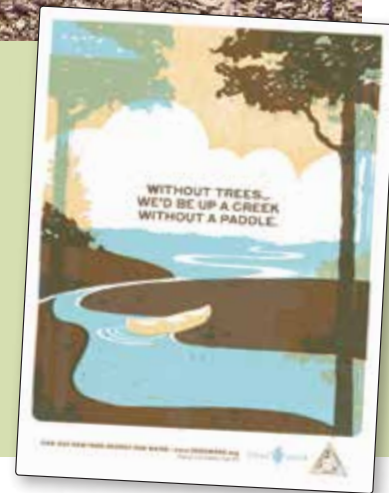
Leslie Stephens and her sons, Michael, Kailer, and Maximos, enjoy the area they have adopted along the Cuivre River. Leslie came up with the winning slogan for a Trees Work poster.

For Leslie, her husband, Matt, and their three boys, Missouri's forests and rivers are a major part of their lives. Leslie took her middle son on a three-day float trip when he was 17 months old and she was 7½ months pregnant with her youngest. Since then, the family has often canoed on the Current, Eleven Point, and Jack's Fork rivers in Missouri. Leslie says, "Since my boys were babies, they have been on the river as much as possible — swimming, canoeing, rock hunting, hiking, exploring, camping, kayaking, and fishing. It's just what we do!"

Since she and her family try to buy local and wooden products rather than imported plastic

Get a Poster, Spread the Word

If there's a public place where you'd like to display a Trees Work poster (coffee shop, restaurant, community center, library, city hall, and church are a few examples) email us at treeswork@mdc.mo.gov for a free poster, while supplies last.



items whenever possible, Leslie is proud of the wooden paddles she uses in their canoe.

FORESTS PROVIDE CLEAN RIVERS AND WOOD PRODUCTS

Leslie could have crafted a Trees Work slogan about how pretty trees are in the fall or how



Trees Work for Our Well-being

- ✦ Seeing trees can improve worker attendance and performance. Employees with views of nature report 15 percent fewer illnesses and feel more enthusiastic and less frustrated than those without a view of nature.
- ✦ A room with a view can help us recover from surgery faster. In a six-year study, hospital patients recovering from surgery who had a view of trees through their windows required fewer pain relievers and left the hospital a day sooner than similar patients who had a view of a brick wall.
- ✦ Those who commute along tree-lined roads remain calmer (with lower pulse and blood pressure) and drive less aggressively than those who drive along roads with fewer trees.
- ✦ People report that woods and parks offer a better place for reflective thought, resting the mind, and creative thinking than their homes.
- ✦ Trees reduce noise. One-hundred-foot-long plantings of tall trees can reduce loudness by 50 percent.
- ✦ Children with Attention Deficit Hyperactivity Disorder (ADHD) experience symptom relief after spending time in an area with trees. Kids are better able to concentrate, complete tasks, and follow directions after playing in natural settings.
- ✦ Because tree-lined streets are more walkable than those with no trees, they help people lose weight and improve heart health. In addition, they promote physical activity in children and longevity in the elderly.
- ✦ Contact with nature helps children to develop imagination and creativity, intellectual capacity, and social relationships.
- ✦ Shade trees planted where children play protect them from the sun's harmful ultraviolet radiation.
- ✦ For each pound of new wood a tree grows, it removes about 1.8 pounds of harmful carbon dioxide from the air and produces 1.3 pounds of oxygen for us to breathe.

Contact with nature helps children to develop imagination and creativity, intellectual capacity, and social relationships.

they provide shade in the summer. But what most excites Leslie, who is also a Stream Team leader, is how Missouri's forests provide clean rivers for her family to enjoy and a local, renewable building resource — wood for her canoe paddles. So she offered a trees work slogan that meant the most to her and her family: "Without trees ... we'd be up a creek without a paddle."

Department foresters, marketing and media specialists, and designers reviewed the entries, and Leslie's slogan, number 932 of 1,326, was the clear winner.

For more information about how trees and forests benefit you, tree and forest resources, and how to order Trees Work posters to display in your area, visit ***TreesWork.org***.

Missouri Department of Conservation Forester Ann Koenig leads the Trees Work campaign. Ann and her family live in Columbia. When she's not busy touting the benefits of trees and forests, Ann enjoys reading and running, cooking, gardening, camping, swimming, and boating.

COMMITTED *to* CONSERVATION

Women
continue to
shape the future
of conservation
in Missouri

BY HEATHER FEELER

For those of us who have grown up in Missouri, especially in the past few decades, we've had the privilege of enjoying conservation at its finest — healthy forests to hike, abundant wildlife to watch or hunt, and ample fish to catch. We have a beautiful state with immense outdoor opportunities. While we're lucky to live here, these rich conservation resources have nothing to do with luck. It's because citizens have led the way, year after year, for a better conservation future.

ILLUSTRATION BY MARK RAITHEL



American journalist and author Norman Cousins said history is a vast early warning system. Missouri conservation history is no different.

In the early 1900s, much of the state's natural resources had been destroyed, pilfered, or used up. Entire forests were cut down for building materials or fuel, leaving only a wasteland of rocky soil. Wildlife were killed in mass numbers and brought by wagonloads to city markets. Fish were dying in streams eroded by timbering and wildfire. It was a dark time on the Missouri landscape, but a new day was dawning.

Citizens came together in 1936 to lead the charge and voted to establish the Conservation Commission to protect the forests, fish, and wildlife in the state. While less highlighted in history books, women played a major role in this turn toward conservation, including publically endorsing the amendment around the state before the vote at the Federation of Women's Clubs and local garden clubs. They also strongly cast their vote during the election, and the Department was established in the Missouri Constitution by more than a 2-to-1 vote.

But the work didn't stop there. In the Department's early days, many influential people, such as E. Sydney Stephens, Aldo Leopold, and I.T. Bode, were making a difference. But one woman played a significant, behind-the-scenes role from the very beginning. Bettye Hornbuckle served as the Department secretary to the Conservation Commission and then as the Director's administrative assistant, and she was a steadfast figure in the prominent decisions of the first two decades of the Department's history.

While Hornbuckle served on staff with the Department, there were many others making a difference who served strictly as volunteers. In 1976, Doris "Dink" Keefe, a mother and homemaker, led a large group of volunteers

for a petition drive to place a conservation sales tax on the Missouri ballot to establish dedicated funding for forests, fish, and wildlife. She volunteered for a full year, unpaid, and meticulously checked thousands of signatures from nine congressional districts. Her tireless efforts, and those of many others, paid off when the one-eighth-cent sales tax for conservation passed in November 1976. It created the critical dedicated funding needed to ensure the success of conservation in Missouri for future generations. It also paved the way for other women of all ages to continue contributing to conservation in their own unique way.

The Scientist

In 2014, Elizabeth "Libby" Schwartz was inducted into the Missouri Conservation Hall of Fame and became part of an elite group of Missourians honored for their outstanding

dedication to conservation in Missouri. Schwartz began her career teaching biology classes at the University of Missouri-Columbia, where she met her future husband and biologist, Charles W. Schwartz. They would become an inseparable team and two of the nation's foremost experts on American wildlife.

Both worked for the Department for more than 30 years, conducting landmark field research together on prairie chickens and box turtles. Research was not the only thing the couple did well together. Charles

and Libby spent weeks at a time in the field capturing unique wildlife photography and footage for Department films, many of which won national and international awards. Their movie, *Bobwhite Through the Year*, won the CONI Grand Medal at the International Sports Film Festival in Rome in 1952.

The Schwartzes also authored and illustrated many scientific articles and books, such as *The Wild Mammals of Missouri*, which was first published in 1959, and which



Libby Schwartz and her husband, Charles, became two of the nation's foremost experts on American wildlife.

Women in Missouri Conservation History

1936, November 3

Missourians, including women and men, vote to establish the Missouri Department of Conservation in the Missouri Constitution by more than two to one in favor. Prior to the vote, many prominent women's groups, including local garden clubs and Federation of Women's Clubs, publically endorse the amendment.

1937

Department of Conservation is established. **Bettye Hornbuckle** plays a major role in early Department efforts, serving the Department as secretary to the Conservation Commission and as the Director's administrative assistant. She continues in that role until her retirement in 1954.

1940, March 4

Commission hires **Faith Watkins** as first female employee assigned to direct a program, including youth and women's programs.



Libby took college classes well into her 80s and even traveled to Alaska to see for herself the melting glaciers she was reading about in the news.

***“If you want to keep doing what
you’re doing into the future, you
need to give it to people who
can keep moving it forward.”
—Pat Jones***



is still used in university courses to this day. They also wrote and illustrated a series of children's books. After Charles' death in 1991, Libby continued working on their final collaborative book, *About Mammals and How They Live*, which was a companion book to their original *The Wild Mammals of Missouri*.

Libby's love of learning, especially about wildlife, continued all her life. She took college classes well into her 80s and even traveled to Alaska to see for herself the melting glaciers she was reading about in the news. Although she passed away in 2013, her talent and contribution to conservation set the standard for future conservationists, both professionally and personally.

At their Department retirement in 1981, they were honored with these words: "No two individuals have contributed more than Charles and Libby Schwartz to the success of Missouri conservation — past, present, and future."

The Landowner

Although Pat Jones grew up in St. Louis, she developed a love of the outdoors at an early age from her parents. Her father would put his canoe on the train and then get off at a river stop to float down the river, often camping overnight at a gravel bar. He eventually would buy some land near Eureka so his young family could also enjoy the weekends and summers on the land. It was an introduction to the outdoors Jones remembers fondly.

"If you didn't get out there on the weekends to the shack, which is what we called the place, it was a lost weekend," said Jones. "It was the only place you really got together as a family."

Jones would eventually marry Ted Jones, a young man from St. Louis, who also had a love of his family farm in Callaway County. Ted's father traded federal land bank bonds for the rambling farm in the 1930s and, although it was overgrown and weedy, young Ted saw potential. When he was 10 years old, he planted a row of pin oak trees he received from Arbor Day to begin a lifelong restoration of the land.

Just as Ted gave his company, Edward Jones Investing, to his employees to carry on the legacy, Pat also wanted to ensure their land had the same long-term impact. She had the idea to donate the land to the Department to form Prairie Fork Conservation Area and create a partnership between the Department, the University of Missouri School of Natural Resources, and the Missouri Prairie Foundation for ongoing natural resource education, natural community restoration, and environmental research.

"If you want to keep doing what you're doing into the future, you need to give it to people who can keep moving it forward," said Jones.

The 900-acre conservation area provides educational opportunities for school-age children and for ongoing research on soil, water, and wildlife. It is a busy place. Last spring, more than 3,000 children, including elementary, secondary, and college-age students, visited Prairie Fork. The area also hosts events for Future Farmers of America, Boy Scouts and Girl Scouts, and the Conservation Careers Academy, which allows high school students to learn about different careers in conservation. Prairie restoration is an ongoing activity, including restoring about 30 to 40 acres each year. There are also two or three research projects — such as groundwater quality or box turtle tracking — underway simultaneously.

All the activity is something Jones loves to see, especially since she gets to personally witness the next generation getting excited about exploring the land, just like she did as a kid. She greets them all with this message, which is engraved on a stone wall on the property: Learn, Get Dirty, and Have Fun!!

"Those three things are all so important," said Jones. "I want kids to come out and be exposed to the land. My favorite part is seeing that happen."

The Volunteer

Because Laura Toombs is a full-time shop owner at the Lake of the Ozarks and mother to a busy teenager, you

1948

Virginia Dunlap is the first female awarded the Master Conservationist award.

1975

Jill Cooper is the first female conservation agent.

1976

Doris J. "Dink" Keefe, conservation volunteer, led a group of volunteers for a petition to place a Conservation Sales Tax on the Missouri ballot. The ballot initiative is supported by Missourians and establishes dedicated funding for forests, fish, and wildlife.

1981

Charles and Elizabeth "Libby" Schwartz retire after 40 years of service with the Department.

1993

Anita B. Gorman is the first woman appointed to serve on the Conservation Commission. Gorman also chaired efforts to fund half the cost of the Discovery Center, later named the Anita B. Gorman Conservation Discovery Center, in Kansas City.

would think she wouldn't have any extra time on her hands. But she makes time each week to volunteer for something she loves and believes in — conservation in her community!

When Toombs moved to the Lake a few years ago, she wanted to find a way to volunteer that would also allow her to get outside in nature. She signed up to take a Missouri Master Naturalist training class with the Department and the University of Missouri Extension through the Lake Master Naturalist chapter. The training provides volunteers an opportunity to learn more about natural resources in their area through science-based education and then to volunteer at local events, educational demonstrations, and stewardship projects. It was a wonderful experience for Toombs.

"You go once a week to the class and learn from the best people in the Department on so many subjects," said Toombs. "It is a great growing experience, and you get to meet some great new friends with common interests."

As part of her Master Naturalist volunteer work, Toombs was interested in starting a conservation kids club at the Lake, modeled after the one she had volunteered at several years ago at the Department's Springfield Conservation Nature Center. With no nature center at the Lake, Toombs felt there was a need for an organized kids club focused on local conservation. With the help of Department staff in the Camdenton office, Toombs was part of the group to launch Conservation Kids Club, a monthly offering for third- to fifth-graders at the Lake to explore conservation, Missouri wildlife, and to have fun.

"It is important for kids to be aware of the outdoors where they live," said Toombs. "If you don't learn about what is out there, it is no great loss when you lose that."

Toombs reflects on her own childhood that set her love of the outdoors in motion. Her father was an avid fisherman and her mother a bird watcher. They were always doing something outside as a family, she said.

"It was a constant influence, always something to do, always something to see, and if you didn't want to fish trout that day, you could always stay by the bank and play," said Toombs. "But it was never an option to not be outside."

Toombs speaks highly of her parents' influence on her outdoor education, but also credits the work of the Department and staff for helping guide her adult education.

"We are so lucky to have the Conservation Department in Missouri because it isn't like this in other states," she said. "Department employees act as a mentor to volunteers, and they are always right there when you need something."

Even though she is busy, her goal with volunteering is to keep paying it forward to help others love the outdoors as much as she does. She has given her time, true, but she has gained so much more in knowledge, meeting people, and feeling good about the work she is doing, she said.

Her advice to others: "Get out there in it! If you are lucky enough to have a Master Naturalist chapter near you, get involved. It deepens your experience of the outdoors and it is fun."

For more information on how you can get involved in conservation, including as a private landowner, volunteer, or to explore a career in conservation, visit mdc.mo.gov. ▲



State Wildlife Veterinarian Kelly Straka inspects an elk calf before its release in Peck Ranch in 2013.

Heather Feeler is the communications manager for the Conservation Department. She enjoys exploring Missouri's outdoors, including hiking, fishing, and geocaching with her sons.

1996

Ann Kutscher, past president of Mid-Mo Conservation Society, becomes first female president of the Conservation Federation of Missouri.

2001

Cynthia Metcalfe is appointed to the Conservation Commission. As commissioner, she promoted land and program management to ensure that all Missourians, especially children, may enjoy nature as well.

2007

With deep roots in both conservation and agriculture, **Becky Plattner** is appointed to the Conservation Commission. She is also a lifetime member of the National Wildlife Conservation Federation.

2012

Department hires **Kelly Straka** as the first state wildlife veterinarian.

2014

Marilynn J. Bradford is currently serving on the Conservation Commission. Her interest is in expanding outdoor opportunities for women and children.

***“It is important for kids to
be aware of the outdoors
where they live.”***

—Laura Toombs







Taming Turkey Talk

To bag your bird, it helps to understand turkey communication

BY JAKE HINDMAN

Toms, like the one pictured here, often gobble in the spring to attract hens and establish dominance.

Spring makes wild turkey hunters daydream of calm mornings with gobbles erupting from every ridge.

In particular, it's the interaction between hunter and turkey that brings many back to the timber each season. However, wild turkey communication is complex, with many different kinds of vocalizations and extensive body language. Hunters can increase their chances of success if they have a complete understanding of how and why turkeys communicate. Let's review the basics.

Turkey Talk 101

Wild turkeys have a well-developed communication system that plays an important role in their lives. From avoiding danger to mating, turkeys depend on communication to survive.

Turkeys use two main forms of communication: vocal and visual. Turkeys often use both methods at the same time. For example, a tom may gobble while also strutting and posturing (the act of spreading its tail fan, dragging its wings, and making its body appear larger) for attraction and dominance. During this display, the gobbler is making his presence known vocally by gobbling and visually by displaying.



Both gobblers and hens make vocalizations throughout the year. Hens will communicate with gobblers by tree calling, yelping, cackling, and cutting.

Vocal Communication

Wild turkeys produce over 20 different types of vocalizations and other sounds (see Turkey Talk Dictionary sidebar for the most common). These calls help birds signal danger, establish social status, and attract a mate. Both gobblers and hens make vocalizations throughout the year. For alarm, all turkeys will “putt.” Biologists and hunters think this call warns offending hunters or predators the turkey has spotted them and their efforts to surprise the bird are over. In addition, this alerts other turkeys within hearing distance to the danger.





To establish social status, turkeys need other birds around them. However, their flocking nature changes throughout the year. For example, in the fall and winter, it is common for gobblers and hens to break into separate flocks. But as spring unfolds, breeding flocks become more common, with a mix of gobblers and hens. Much of the social status within the flock is established through calling and displaying. Both gobblers and hens will fight for rank within the pecking order while making a number of vocalizations. Establishing dominance helps gobblers, in particular, transition into spring, the mating season, with ease.

The turkey's spring mating ritual and the accompanying sounds and behaviors are well documented. Gobblers are polygamous and will mate with several hens throughout the season. Usually around mid-March, the first gobblers can be heard at daylight. Toms will typi-

In the fall and winter, it is common for gobblers and hens to break into separate flocks. But as spring unfolds, breeding flocks, such as the one pictured above, become more common, with a mix of gobblers and hens.

cally fly down, stand on a ridge, gobble, strut, and spit and drum in the hopes of attracting a hen. Many times, gobbling subsides after fly-down, and toms switch almost entirely to strutting with spitting and drumming. Humans can hear this unique sound only a short distance, usually less than 75 yards. Hens will communicate frequently with gobblers by tree calling, yelping, cackling, and cutting and by coming to the vocal communication offered by toms. This ritual continues through the end of May and overlaps with our spring turkey-hunting season.

Turkey Body Language

Wild turkeys use a variety of behaviors and appearances to signal their sex, age, mood, or intention. Get to know their most common behaviors and physical features.

Body Blow-up. Gobblers spread their tail fan, erect their body feathers, and drag their wings while showing off their iridescent colors to establish dominance and attract a mate.

Snood Senses. Watch a tom's snood as he approaches your setup. If the snood is long and droopy, he is likely content. If the snood stands straight up quickly, the bird is likely nervous and may not be hanging around long.

Rainbow Head. Turkeys' heads change color frequently. In the spring, a gobbler's head color can change between red, white, and blue, often within a few seconds, depending on his mood.

Bristly Beard. Most toms have beards made up of hairlike feathers protruding from the center of the chest. Beards are thought to indicate the male sex and may communicate dominance. However, as many as 20 percent of hens have beards. Beards serve little purpose for determining age past two years. This is because they are rubbed or broken off as the birds walk or by ice buildup during winter.

Sharp Spurs. Most gobblers have spurs, which are curved features growing from the inner leg. Gobblers use spurs to fight and establish dominance. Hens rarely have spurs. Spur length is the most accurate indicator for the aging of toms.



NOPPADOL PAOTHONG

Visual Communication

Although we think of turkeys gobbling and yelping to communicate, they don't always make noise to send a message. Wild turkeys frequently use body language and behavior — strutting is an example. In addition to strutting, turkeys also exhibit other posturing to help maintain social structure within a flock. This posturing can lead to fighting to establish dominance as mentioned earlier (for more on body language see the sidebar above).

As turkeys approach your setup, pay attention to the birds' body language. A relaxed tom will exhibit normal walking behavior, may strut, and will usually have a relaxed or drooping snood. Stiff walking,

high-stretched neck and head, putting, and a shortened snood can be signs of an alert turkey that may be aware of your or another hunter's location.

Learn the Lingo, Master the Methods

Although turkeys have an extensive vocabulary, you should concentrate on mastering the two most common calls: the yelp and cluck. Learn how to make the calls and, more importantly, when to make them. Practice these calls on a device that is simple and easy to operate until you can produce the sounds with ease.

There are a number of calling devices designed to lure a gobbler into range. The two main types are friction and air blown.



Friction calls

Turkey Talk Dictionary

Wild turkeys produce a number of vocalizations and sounds. Become familiar with the most basic (for recordings and more information on turkey vocalizations visit mdc.mo.gov/node/29704).

VOCALIZATION/SOUND	DESCRIPTION	APPLICATION
Cackle	Call sometimes made by turkeys when flying, often when flying down from the roost	Use this call along with wingbeats to let a gobbler know you are on the ground and ready for business.
Cluck	Soft, contented staccato notes	Excellent reassurance call and can mean "I'm here, where are you?"
Cutt	Sharp, staccato notes with varying pitch and intensity. Conveys excitement and sometimes aggression	Mix with yelps to convey excitement.
Fighting Purrs	Loud rolling call produced when turkeys are fighting	Use this call sparingly to fake a fight.
Gobble	Loud gurgling call made primarily by toms to attract hens in the spring	Not recommended to imitate due to safety
Kee Kee Run	Usually three high-pitched notes followed by yelps. Made by young turkeys when lost	Commonly used in the fall after a flock has been separated
Purr	Soft, rolling call often accompanied by clucks	Use this to signify contentment and to convince a turkey to come those last few yards.
Putt	Made by all turkeys in alarm, typically when danger has been spotted	The turkey knows you are there, and will likely leave.
Spit and Drum	Thought to be produced from the gobbler's mouth (spit) and chest (drumming). This sound is accompanied by strutting.	Toms will spit and drum while strutting and displaying to attract hens.
Tree Call	Soft nasal yelps made on the roost	Great first call to use when calling to a gobbler before fly-down
Yelp	Many versions exist (plain, excited, assembly). This is the most common call of hens.	Use variations of the yelp for general communication with turkeys.

For beginners, a friction call (box or push button) is a great choice. Try a few inexpensive types of calls at your local sporting goods store.

Friction Devices: These calling devices produce turkey sounds by rubbing together pieces of wood, slate, ceramic, or glass. Typical friction calls include pot/pan calls, box calls, and push/pull calls. These are simple to use and recommended for everyone. In addition, these calls can produce incredibly realistic sounds. One downside is most friction calls require two hands to operate, which creates movement that may spook an incoming turkey. Try different types of friction devices as your skills improve.

Air-Blown Devices: Typically these include mouth diaphragm calls and tube

calls. These types of calls can produce a wide range of realistic sounds, but they require more practice than friction calls. In addition, you can use mouth diaphragm calls with minimal movement, making them great to use when working a turkey those last few yards.

As with other wildlife calling, two main forms of turkey calling are practiced: contact calling and blind calling. In contact calling, you have seen or heard the turkey and can watch or hear the bird's reaction when you call. This can be the most effective form of calling. During blind calling situations, you use calls in a likely spot, approximately every 30 minutes, with the hope of calling in a turkey within hearing distance. If you're walking and calling, wear blaze orange.



Air-blown calls

Learn how to make the calls, and — more importantly — when to make them.

Calling Scenarios

Every turkey hunt will bring about different scenarios. Here are three of the most common.

Youth Season: Opening Day

Situation: It is 6 a.m. and there are two toms gobbling routinely about 100 yards ahead in the timber. You also hear hens calling farther away and fear the hens will drag the gobblers away. Your soft calls have the gobblers gobbling; however, they have stood their ground. How do you call in one of the toms for a shot?

Technique: Challenge the talkative hens by mimicking their calls and topping it with more aggressive cutting and yelping. Use different calling devices to convince the flock you are more than one bird. Add realism by mixing in clucks and purrs with leaf scratching. Expect the hens to come in and drag the gobblers with them. Wait 15 to 20 minutes before trying another tactic.

Regular Spring Season: Opening Day

Situation: Your scouting has confirmed a gobbler typically flies down and struts in a log landing and remains there until mid-morning. You have eased in and now you are sitting on the edge of that log landing with a single hen decoy positioned 20 yards in front of you. It is 5:45 a.m. and the tom gobbled for the first time 100 yards to your right.

Technique: Start by offering soft tree yelps to let the gobbler know you are there. He will likely gobble back eagerly. Wait for him to fly down and then offer a short series of excited cutts and yelps, and then go silent. Keep your firearm pointed in

Stiff walking, high-stretched neck and head, putting, and a shortened snood can be signs of an alert turkey that may be aware of your or another hunter's location.

Trick a Tom

Every turkey will respond differently to communication techniques. Use these guidelines for success.

Pick a Solid Setup: Scout the area in advance to locate a turkey hangout. Find a setup location before making any calls in case the gobbler comes in quickly. Keep it safe by choosing a tree that is wider than your shoulders and a spot where you can be seen by others. Keep your gun up and pointed in the direction from which you expect the gobbler to approach and keep movement to a minimum. Leave your safety on and your finger off the trigger until you confirm your target and a clear background.

Build the Conversation: Start out with soft passive calls (plain yelps, clucks) before becoming aggressive. You can always ramp up calling later. However, once aggressive language is used, you cannot take it back.

Learn the Language: Understand what you are saying when you call to a turkey. For example, make sure you are not putting to birds, which would actually be telling them to stay away!

Diversify Calling: Use a variety of calls and calling devices. In addition, add in natural sounds. Examples include wing flapping combined with fly-down cackles or leaf scratching combined with clucks and purrs.

Read Reaction: If contact calling, pay attention to the turkey's reaction and change the conversation if needed. For example, if a turkey cuts off your calling by gobbling, this may be an aggressive tom that may come in quickly. If a turkey is approaching your setup, only call enough to keep the bird coming. Often, once a turkey has committed to investigating, you will not need to call again. If blind calling, pay close attention to your surroundings because a turkey could approach your setup anytime.

the direction of his gobbles. Listen for spitting and drumming as he approaches.

Regular Spring Season: Last Day

Situation: It is 7 a.m. and you are hunting a large field where gobblers routinely strut. You have heard little gobbling, and nothing is close. What calls might you try to attract a tom?



Technique: Offer short series of soft yelps, clucks, and purrs every 20 to 30 minutes. Don't be surprised if a gobbler shows up unannounced.

Calling up a love-crazed gobbler can be one of the most fulfilling experiences for any hunter. However, for calling to be effective, it must be used in combination with other strategies such as woodsmanship, decoys, and solid set-

ups. For many hunters, it takes experience to understand how to apply the language of wild birds. Study up on how turkeys communicate, apply that knowledge appropriately, and you will be well on your way to notching your tag this spring. ▲

Jake Hindman, outreach and education district supervisor in the St. Louis Region, enjoys hunting and communicating with wild turkeys.

Long-Tailed Duck

A LONG-TAILED DUCK (*Clangula hyemalis*) gulps down a gizzard shad at Lion's Lake in Washington, Missouri. A serendipitous series of conversations led me to water's edge, where I photographed this sea duck, formerly known as the oldsquaw, on a chilly afternoon last March.

A few days earlier, I had received an email from my friend Brad, asking to verify his identification of a juvenile long-tailed duck he had observed on Creve Coeur Lake in St. Louis. I agreed with his identification, but I also checked with my friend Mark to be positive. Mark told me another longtail had been spotted at Lion's Lake, a city park lake in Washington, only 15 minutes from my home. Excited, I packed my camera gear and headed for the site. Upon arrival, I discovered not one, but three long-tailed ducks diving for shad in the middle of the lake.

If you are not a waterfowler or serious birder, you might be wondering, "Why all the excitement about a duck?" Well, the long-tailed duck isn't just any duck you might see in Missouri, such as a mallard or gadwall. The longtail breeds far north in the Arctic, and its idea of warm, wintering ground is coastal Canada and the northern coastlines of the United States.

The long-tailed duck is listed in *Birds in Missouri* as a rare migrant, usually spotted on large reservoirs or the upper Mississippi River. Its black and white plumage varies depending on the season. The male I've featured here is in winter plumage with its white head, gray face, black patch along the neck, and black back feathers leading to a long whip of a black tail. Later in spring, both the male and female become much darker, the male's head and neck turning completely black. My favorite feature of the long-tailed duck is the bubblegum-colored ring around the male's bill.

The long-tailed duck dives for prey, and it is known for spending more time underwater than on the surface, at least when actively feeding. I found this to be the case, as well. Often, I had to reposition my tripod for a shot as an individual surfaced at an unexpected location, far from its original position. Skillful in technique, one rarely surfaced without a squirming gizzard shad. I was enthralled as each longtail finished off its meal, facilitating the process by lifting its head and tail to form a graceful arc (see inset photo).

I feel fortunate to have seen the longtails so close to my home, and I often wonder what they were doing so far south along the central flyway. Although I'd heard stories from duck hunters about occasional sightings of oldsquaws in Missouri, I never thought I'd see one myself. It's hard to believe that after all those years I now feel completely in touch with these long-distance travelers from the Arctic. I sure hope I see them again someday. You can bet I'll be checking Lion's Lake this spring.

—Story and photographs by Danny Brown

📷 (main) 500mm lens +2.0 teleconverter • f/9 • 1/320 sec • ISO 400

📷 (inset) 500mm lens +1.4 teleconverter • f/5.6 • 1/400 sec • ISO 400

We help people discover nature through our online Field Guide. Visit mdc.mo.gov/node/73 to learn more about Missouri's plants and animals.





Woodson K. Woods Memorial Conservation Area

Diverse is the best word to describe this large area, ranging from Meramec River bottoms to glade and woodland hillsides, to sprawling oak-hickory forest dotted with pine and beautiful grasslands.

WOODSON K. WOODS is a 5,661-acre area located in Phelps and Crawford counties only a few minutes southeast of St. James. Most of the area was purchased in 1971, thanks to a generous donation from the James H. Woods Foundation and Land and Water Conservation Funds. The area features the 417-acre Spring's End Forest Natural Area that includes the largest contiguous block of intact bottomland forest remaining on the Meramec River. The area also boasts some of the best archery deer hunting available on public land in the state, some spectacular scenery, and the Highway 8 Access to the Meramec River.

Management of the area encompasses a wide variety of practices and habitat types. Upland forest is found on large portions of the property and is managed using thinning and occasional prescribed burns to maintain a healthy forest and provide maximum benefit to wildlife. Bottomland forest found within the boundaries of the Spring's End Forest Natural Area is monitored closely for invasive species, but is largely left as old-growth forest for its watershed function and unique wildlife habitat. This forest is home to two great blue heron rookeries, bald eagles, cerulean warblers, and a host of aquatic species of concern.

Old fields are maintained across the property to create a home for healthy populations of rabbits and songbirds. Two large warm-season grass fields



16–35mm lens +2.0x teleconverter • f/16 • 1/25 sec • ISO 200 | by David Stonner

provide habitat for upland game like quail and gorgeous vistas of wildflowers through most of the summer and deep ambers of dormant grasses in the fall and winter. Green-browse plots and crop fields are also maintained as forage for a variety of wildlife.

The area's variety of ecotypes provides food and shelter for many kinds of fish and wildlife and a range of activities for visitors.

Popular activities include floating the 4.5 miles of Meramec River that cut through the area on a canoe or kayak, fishing in the Red Ribbon Trout Management section of the Meramec River, and smallmouth bass fishing in the Dry Fork River. There are also 50 miles of primitive maintenance roads for nature watching, hunting small game, turkey hunting, and archery deer hunting.

—Mike Fleischhauer, area manager



Woodson K. Woods Memorial Conservation Area

Recreation Opportunities: Hiking; wildlife viewing; canoeing; hunting for squirrel, rabbit, turkey, quail, and waterfowl under statewide regulations; archery-only deer hunting; fishing the Dry Fork River and the Meramec River (Red Ribbon Trout Area from Hwy 8 to Scotts Ford Access on Meramec River)

Unique Features: Managed forest and grasslands, Dry Fork River, Meramec River, Spring's End Forest Natural Area

For More Information: Call 573-368-2225 or visit mdc.mo.gov/node/a7103.



IDEAS
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To find more events near you, call your regional office (phone numbers on Page 3), or visit mdc.mo.gov and choose your region.

PRIMITIVE HUNTING

MARCH 7 • SATURDAY • 9 A.M.–3 P.M.

Central Region, Central Regional Office and Conservation Research Center, 3500 East Gans Road, Columbia, MO 65201

Registration required, call Brian Flowers at 573-815-7901, ext. 3388

Ages 11 and older

Learn about the unique tools and hunting methods that early Missourians used. Participants will have the opportunity to tour the University of Missouri's Grayson Archery Collection.

NATIVE PLANTS FOR HOMEOWNERS WORKSHOP

MARCH 7 • SATURDAY • 9:30–11 A.M.

St. Louis Region, Rockwoods Reservation, 2751 Glencoe Road, Wildwood, MO 63038

*Registration required, beginning Feb. 20.
Call 636-458-2236*

Adults

Naturally resilient native grasses, sedges, flowers, shrubs, vines, and trees are great for home landscaping. Solve common gardening problems and attract butterflies, hummingbirds, and songbirds.

IT'S PURPLE MARTIN TIME

MARCH 14 • SATURDAY • 9:30–11 A.M.

St. Louis Region, August A. Busch Memorial Conservation Area, 2360 Hwy. D, St. Charles, MO 63304

*Registration required, beginning Feb. 27.
Call 636-441-4554*

Ages 14 and older

Ready to welcome purple martins back from South America? Learn how you can help conserve these beautiful insect-eating and cavity-dwelling swallows native to Missouri.

NATIVE PLANT SEMINAR

MARCH 14 • SATURDAY • 8 A.M.–3 P.M.

Southeast Region, Cape Girardeau Conservation Nature Center, 2289 County Park Drive, Cape Girardeau, MO 63701

*Registration required, beginning Feb. 3.
Call 573-290-5218*

Ages 16 and older

Conservation Department and the Cape Girardeau County Master Gardeners host the 10th annual native plant seminar. Call the nature center about session times and guest speakers.

WOMEN'S HIKE AT HICKORY CANYONS AND PICKLE SPRINGS

MARCH 21 • SATURDAY • 8 A.M.–4:30 P.M.

Southeast Region, Cape Girardeau Conservation Nature Center, 2289 County Park Drive, Cape Girardeau, MO 63701

*Registration required, beginning March 3.
Call 573-290-5218*

Women (including ages 14–17 accompanied by an adult female)

A naturalist will lead you on the trails at these two beautiful natural areas. Waterfalls, hoodoos, and interesting plants are the stars of these two locations. Hike is 3.5 miles and rated moderate.

NATIVE PLANT SALE

SATURDAY • MARCH 28 • 10 A.M.–2 P.M.

Central Region, Runge Conservation Nature Center, Hwy 179, Jefferson City, MO 65102

No registration required

All ages

Native Missouri plants will be on sale through a variety of Missouri vendors. There will be native plant activities and resources available to help you with landscaping.

DISCOVER NATURE — BEGINNING TURKEY HUNTING

MARCH 28 • SATURDAY • 8:30 A.M.–2 P.M.

Southwest Region, Dalton Shooting Range and Outdoor Education Center, 4897 N. Farm Road 61, Ash Grove, MO 65604

*Registration required by March 27.
Call 417-742-4361*

All ages, families (15 and younger accompanied by adult)

Spring turkey hunting offers some of the most challenging, exciting, and rewarding hunts in Missouri! Join us to sharpen your skills, learn new techniques, and gain confidence.

DISCOVER NATURE — BEGINNING TURKEY HUNTING

APRIL 1 • WEDNESDAY • 6–9 P.M.

Southwest Region, Wildcat Glades Conservation & Audubon Center, 201 W. Riviera Drive, Joplin, MO 64804

*Registration required by March 30.
Call 417-629-3423*

All ages, families (15 and younger accompanied by adult)

Spring turkey hunting offers some of the most challenging, exciting, and rewarding hunts in Missouri! Join us to sharpen your skills, learn new techniques, and gain confidence.



Subscribe online • mdc.mo.gov/node/9087 • Free to Missouri households



I Am Conservation

Kathie Brennan spends much of her free time helping build the Ozark Trail in Southeast Missouri. The lifelong Cape Girardeau, Missouri, resident became involved with the Ozark Trail Association in 2005. "I was hooked," said Brennan. "Not only do I love the physical labor involved in what I was doing, but walking out on new trail that was just woods earlier that day gives me such a feeling of satisfaction in knowing I'm helping continue the mission of the OTA." Brennan was the first woman to become a United States Forest Service certified cross cut and chain saw operator with the OTA and a Colorado Outdoor Institute certified crew leader. She has also taken on the role of volunteer organizer and helps develop and organize major trail construction events. "Planning has to begin months in advance by creating a schedule of events that involves working alongside the land managers from the Forest Service, the Missouri Department of Conservation, the Department of Natural Resources, the L-A-D Foundation, and private landowners," said Brennan. "Other than the quality of life issue, our trails are an economic boon for communities. The Ozark Trail is an ongoing project for future generations, and I hope that the opportunities that I can give to volunteers and their families to be part of the trail will help see it through to completion." —*photograph by David Stonner*